



## **SUBMITTAL**

### **Project**

EM Engineering - KS Montgomery - 2142023

### **Date**

Tuesday, February 14, 2023

James Starkey  
Habegger Corporation  
3079 Silver Drive  
Columbus Ohio 43224  
614-267-7834 x7665

## Table Of Contents

Project: EM Engineering - KS Montgomery - 2142023  
Prepared By: James Starkey

02/14/2023

Unit Report.....	3
Performance Summary.....	5
System Parameters.....	5
Electrical Data.....	5
Acoustic Summary.....	6
Certified Drawing.....	7

## Unit Report For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
 Prepared By: James Starkey

02/14/2023



Fig. 1 - Typical Coil

### Outdoor Unit Parameters

Unit Model:.....**GA4S**  
 Unit Size:.....**4 Tons (Size 48) High Efficiency**  
 Voltage:.....**208/230-1-60 (Sentry Tier)** V-Ph-Hz

### Indoor Coil Parameters

Unit Model:.....**CVPM**  
 Unit Size:.....**4 Tons (Size 48)**  
 Cabinet Finish:.....**Standard**  
 Cabinet Width:.....**21 inch**  
 Furnace Family:.....**926TB60100V21\*\*\***

### Outdoor Unit Dimensions and Weight

Unit Length:.....**31.1875** in  
 Unit Width:.....**31.1875** in  
 Unit Height:.....**28.25** in  
 Unit Shipping Weight:.....**188.** lb

### Indoor Coil Dimensions and Weight

Unit Length:.....**20.63** in  
 Unit Width:.....**21** in  
 Unit Height:.....**21.9375** in  
 Unit Shipping Weight:.....**45.4** lb

### RESIDENTIAL APPLICATIONS

This warranty is to the original purchasing owner and subsequent owners only to the extent and as stated in the Warranty Conditions and below. The limited warranty period in years, depending on the part and the claimant, is as shown in the table below.

Limited Warranty (Years)		
Item	Original Owner	Subsequent Owner
Parts	10* (or 5)	5
Compressor	10* (or 5)	5

\*If properly registered within 90 days of original installation, otherwise 5 years (except in California and Quebec and other jurisdictions that prohibit warranty benefits conditioned on registration). See Warranty Conditions below.

### OTHER APPLICATIONS

The warranty period is five (5) years on the compressor, and one (1) year on all other parts. The warranty is the original owner only and is not available for subsequent owners.

### Ordering Information

Part Number	Description	Quantity
<b>Outdoor Unit</b>		
GA4SAN44800N	Sentry Series Air Conditioner 4 Tons Cooling 14 SEER Std North Area	1
<b>Accessories</b>		
KSALA0301410	Low-Ambient Pressure Switch for Outdoor Unit	1
KAACH1601AAA	Crankcase Heater for Outdoor Unit	1
KSAFT0101AAA	Evaporator Freeze Thermostat for Outdoor Unit	1
KSAHS2501AAA	Hard Start Kit for Outdoor Unit	1
KAALS0201LLS	Liquid-Line Solenoid Valve for Outdoor Unit	1
<b>Indoor Coil</b>		
CVPM4821XMC	Cased Vertical V-Coil Evaporator Coil with Puron 24 Tons Cooling	1

## Unit Report For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
 Prepared By: James Starkey

02/14/2023

	21 inch	
<b>Furnace</b>		
926TB60100V21	926TB Preferred +96 Condensing Gas Furnace	1
	+96 AFUE	
	Up to 2000 Clg CFM on Evap Coil	
	100,000 Btuh (Size 100)	
	Two-Stage B Series	
	Variable Speed	
<b>Accessories</b>		
KGACK0101HCK	Horizontal Trap Grommet - Direct Vent for Furnace	1

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahridirectory.org](http://www.ahridirectory.org) for the most up-to-date information.

### Furnace Parameters and Dimensions and Weight

Furnace:.....**SEER Enhancing Furnace**  
 Furnace Model:.....**92**  
 Furnace Efficiency:.....**+96 AFUE**  
 Clg Size Airflow:**Up to 2000 Clg CFM on Evap Coil**  
 Htg Capacity Size:.....**100,000 Btuh (Size 100)**  
 Unit Length:.....**29.50** in  
 Unit Width:.....**21.00** in  
 Unit Height:.....**35.00** in  
 Unit Shipping Weight:.....**170.** lb



The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahridirectory.org](http://www.ahridirectory.org) for the most up-to-date information.

# Performance Summary For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
Prepared By: James Starkey

02/14/2023

## System Performance

System:.....GA4S/CVPM  
System Quantity:.....1  
Altitude:.....0.0 ft  
Furnace Type:.....926TB60100V21\*\*\*  
Linear Pipe Length:.....0.0 ft  
SEER2 @ ARI Conditions:.....13.4  
EER2 @ ARI Conditions:.....11.0

Actual Clg Airflow:.....1600.0 CFM  
Standard Clg Airflow:.....1600.0 CFM  
Total Net Clg Capacity:.....42.56 MBH  
Net Sensible Clg Capacity:.....31.98 MBH  
Total System Power:.....4.06 kW

## System Parameters

### Outdoor Unit Parameters

Unit Model:.....GA4SAN44800N  
Unit Size (Nominal):**4 Tons (Size 48) High Efficiency**  
Voltage:.....208/230-1-60 (Sentry Tier) V-Ph-Hz  
Clg Ent Air DB Ambient:.....95.0 °F

### Indoor Coil Parameters

Unit Model:.....CVPMA4821XMC  
Unit Size (Nominal):.....4 Tons (Size 48)  
Ent Air DB:.....80.00 °F  
Ent Air WB:.....67.00 °F  
Ent Enthalpy:.....31.44 BTU/lb  
Lvg Air DB:.....61.50 °F  
Lvg Air WB:.....58.77 °F  
Lvg Enthalpy:.....25.53 BTU/lb  
Total External Static:.....0.50 in wg

### Furnace Ratings

Furnace:.....926TB60100V21  
Furnace Efficiency:.....+96 AFUE  
Input Max Heat:.....100,000 BTU/hr  
Input Min Heat:.....65,000 BTU/hr  
Output Max Heat:.....97,000 BTU/hr  
Output Min Heat:.....63,000 BTU/hr

### Furnace Performance

Certified Temp High Rise Range:.....40-70 F  
Certified Temp Low Rise Range:.....30-60 F

**The customer must ensure the specified airflow and static pressure are within furnace capabilities.**

## Electrical Data

### Outdoor Electrical Data

Unit Voltage:.....208/230-1-60 (Sentry Tier) V-Ph-Hz  
Fan Motor FLA:.....1.40 Amps  
MCA:.....24.5 Amps  
Max Fuse:.....40 Amps  
Operating Range Min:.....197 V  
Operating Range Max:.....253 V  
Compressor RLA:.....18.5 Amps  
Compressor LRA:.....124.0 Amps

### Furnace Electrical Data

Unit Voltage:.....115-1-60 V-Ph-Hz  
Unit MCA:.....14.7 Amps  
Unit MOCP:.....20 Amps

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahridirectory.org](http://www.ahridirectory.org) for the most up-to-date information.

# Acoustic Summary For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
Prepared By: James Starkey

02/14/2023

## Outdoor Unit Parameters:

Unit Model:.....**GA4S**  
Unit Size:.....**4 Tons (Size 48) High Efficiency**  
Variations:.....**Std North Area**

Octave Band Center Frequency, Hz	125	250	500	1k	2k	4k	8k	dBA
Sound Power,dB	72.3	74.1	71.2	70.6	63.8	61.6	55.9	
A-Weighted Sound Power, dBA								76.0

## Indoor Coil Parameters:

Unit Model:.....**CVPM**  
Unit Size:.....**4 Tons (Size 48)**  
Cabinet Finish:.....**Standard**  
Cabinet Width:.....**21 inch**

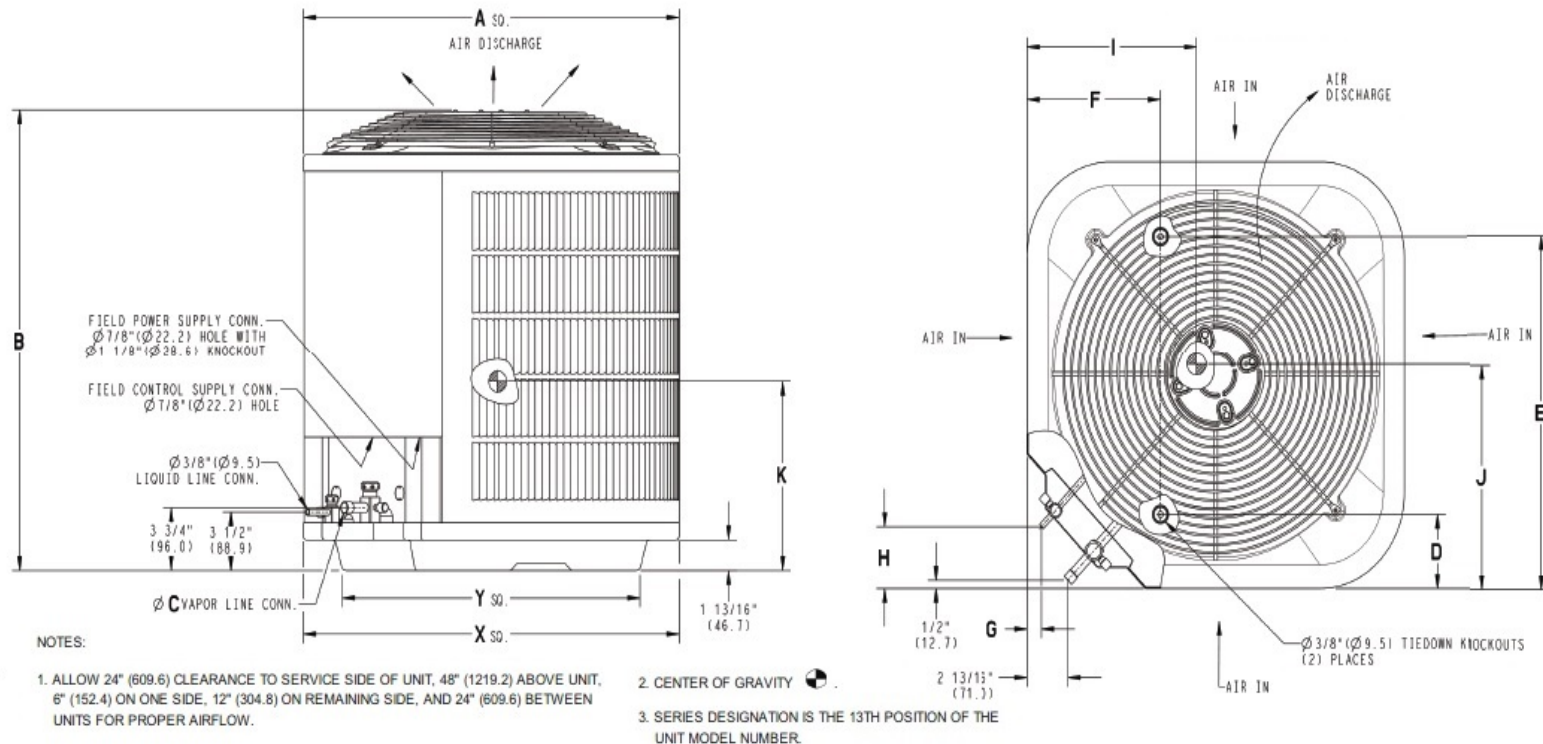
**No Indoor sound data available.**

**The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahridirectory.org](http://www.ahridirectory.org) for the most up-to-date information.**

# Certified Drawing For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
 Prepared By: James Starkey

02/14/2023



## Outdoor Model

Unit Model:.....**GA4S**  
 Unit Size:.....**4 Tons (Size 48) High Efficiency**  
 Voltage:.....**208/230-1-60 (Sentry Tier)** V-Ph-Hz  
 SEER:.....**14**  
 PartNumber:.....**GA4SAN44800N**

Shipping Dimensions and Weights	Outdoor Unit
Height	32.00 in
Width	32.19 in
Length	32.19 in
Operating Weight	170. lb
Shipping Weight	188. lb

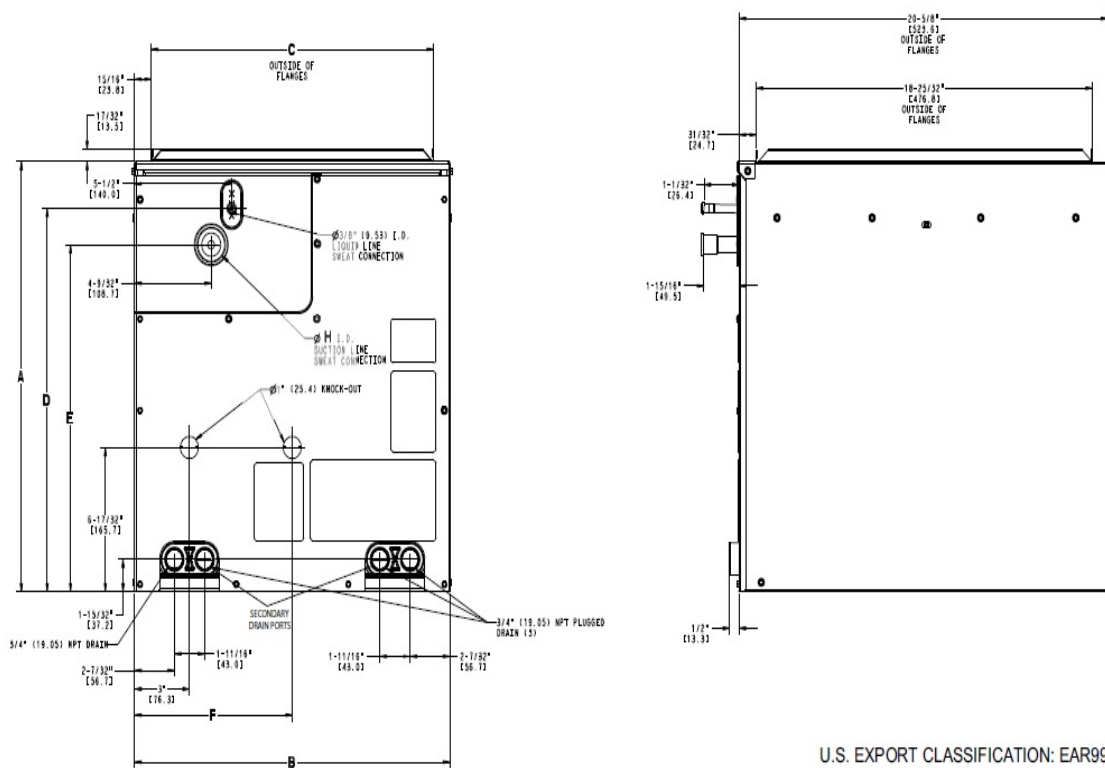
Dimensions										
A	B	C	D	E	F	G	H	I	J	K
31.19 in	28.25 in	0.88 in	6.56 in	24.69 in	9.13 in	0.30 in	3.00 in	14.50 in	14.50 in	12.50 in

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahrirectory.org](http://www.ahrirectory.org) for the most up-to-date information.

# Certified Drawing For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
 Prepared By: James Starkey

02/14/2023



U.S. EXPORT CLASSIFICATION: EAR99

**Indoor Coil**

Unit Model:.....**CVPM**  
 Unit Size:.....**4 Tons (Size 48)**  
 Cabinet Finish:.....**Standard**  
 Cabinet Width:.....**21 inch**  
 PartNumber:.....**CVPM4821XMC**

Dimensions and Weights		Indoor Coil
Height		23.50 in
Width		23.00 in
Length		23.80 in
Shipping Weight		45.4 lb

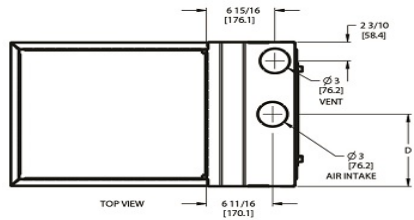
Dimensions							
A	B	C	D	E	F	H	J
21.94 in	21.00 in	19.25 in	20.06 in	18.63 in	10.50 in	0.88 in	17.00 in

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahrirectory.org](http://www.ahrirectory.org) for the most up-to-date information.

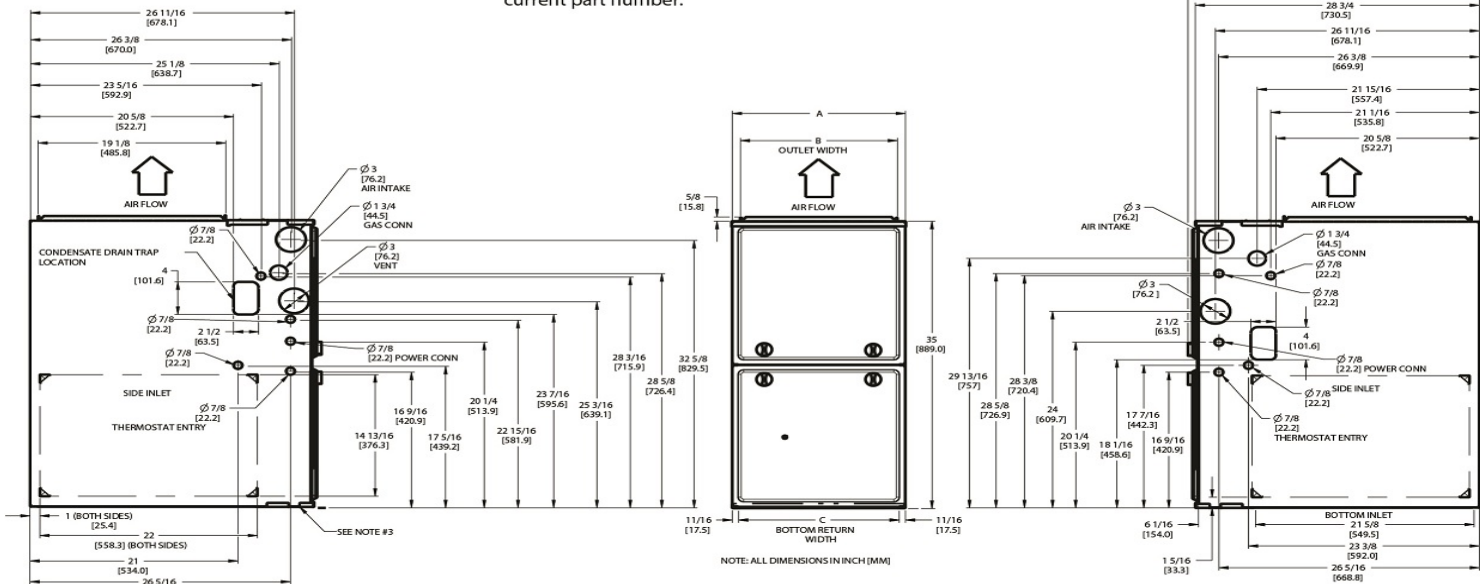
# Certified Drawing For 4 Ton

Project: EM Engineering - KS Montgomery - 2142023  
 Prepared By: James Starkey

02/14/2023



- NOTES:**
- Doors may vary by model.
  - Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
    - For 800 CFM-16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
    - For 1200 CFM-20-in. (508 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
    - For 1600 CFM-22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560mm) rectangle.
    - Return air above 1800 CFM at 0.5 in. w.c. ESP on 24.5" casing, requires one of the following configurations: 2 sides, 1 side and a bottom or bottom only. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace.
  - Vent and Combustion air pipes through blower compartment must use accessory "Vent Kit - Through the Cabinet". See accessory list for current part number.



DIMENSIONAL DRAWING

REV	1	E
SHT	1	
SD5024-4		
DATE PLOTTED		

Furnace Model:.....**92**  
 Furnace Efficiency:.....**+96 AFUE**  
 Clg Size Airflow:**Up to 2000 Clg CFM on Evap Coil**

Htg Capacity Size:.....**100,000 Btuh (Size 100)**  
 PartNumber:.....**926TB60100V21**

Dimensions				
A	B	C	D	Shipping Wgt
21.00 in	19.38 in	19.50 in	10.50 in	170.00 in

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at [www.ahrirectory.org](http://www.ahrirectory.org) for the most up-to-date information.